



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,548	01/30/2004	Hans Peter Nageli	741401-1010	6608
24504	7590	09/20/2005	EXAMINER	
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP 100 GALLERIA PARKWAY, NW STE 1750 ATLANTA, GA 30339-5948			HUNNINGS, TRAVIS R	
			ART UNIT	PAPER NUMBER
			2632	

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/768,548

Applicant(s)

NAGELI, HANS PETER

Examiner

Travis R. Hunnings

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: reference '130'.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: references '216' and '220' in figure 2; reference '312' in figure 3; reference '816' in figure 7; reference '2026' in figure 13; reference '906' in figure 8; references '1011' and '1026' in figure 9; references '1011' and '1027' in figure 10.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-6, 8-12, 15-17, 19-21, 24, 29, 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US Patent 6,700,493).

Regarding claim 1, Robinson discloses *Method, Apparatus And System For Tracking, Locating And Monitoring An Object Or Individual* that has the following claimed limitations:

The claimed central server is met by the host computer (abstract);

The claimed portable detachable tracking unit is met by the transceiver unit (column 8, lines 30-54);

The claimed antenna that is capable of communication with both a GPS satellite and a two-way satellite is met by the transceiver unit communicating with a two-way communications satellite and global positioning satellites (column 8, lines 30-54);

The claimed processing device is met by the microprocessor (column 6, lines 16-30);

The claimed GPS receiver for receiving signals from the GPS satellite is met by the transceiver unit communicating with the global positioning units and therefore it

Art Unit: 2632

would be obvious that the unit has a GPS receiver for receiving the GPS signals (column 8, lines 30-54);

The claimed transmitter for transmitting information to the central server via the two-way satellite is met by the transceiver communicating with the communication satellites and therefore it would be obvious that the unit has a transmitter for enabling the communication (column 8, lines 30-54);

The claimed housing is met by the transceiver unit as shown in figures 2A, 2B and 2C;

The claimed means for attaching and detaching the tracking unit to the shipping container is met by the mounting flanges for attaching the device (column 5, lines 15-35);

Though Robinson does not specifically disclose the claimed modem it would have been obvious for one ordinary skilled artisan at the time the invention was made to readily recognize that in order to provide modulation/demodulation for the transmit and receive operations, Robinson would obviously provide a modem to carry out its intended function.

Regarding claim 4, the claimed tracking unit also having a receiver for receiving communications from the two-way satellite is met by the receiver communicating with the communication satellites and therefore it would be obvious that the unit has a transmitter for enabling the communication (column 8, lines 30-54).

Regarding claim 5, the claimed tracking unit further including an internal power supply is met by the battery backup (column 6, lines 16-30).

Regarding claim 6, the claimed internal power supply of the tracking unit being provided by one of a fuel cell and battery is met by the battery backup (column 6, lines 16-30).

Regarding claim 8, the claimed shipping container having at least one door and at least one locking bar for locking all doors with the tracking unit being attached to the locking bars so that the locking bars can not be unlocked without first detaching the tracking unit is met by the transceiver unit can be attached a fixed position on the shipping container (column 5, lines 15-35). It would have been obvious to one of ordinary skill in the art to place the device wherever the user wanted on the shipping container, including being placed in the way of the locking bars so that the device would have to be removed in order to open the container and in so doing, provide added security for the container.

Regarding claim 9, the claimed shipping container having at least one door and at least one locking bar for locking all doors with the tracking unit being attached to the locking bars by at least one clamp that clamps around a locking bar that prevents the tracking unit from moving up and down on the bar and the tracking unit is also directly attached to the shipping container so that the bars can not be moved to unlock the

Art Unit: 2632

doors without detaching the tracking unit is met by the transceiver unit can be attached a fixed position on the shipping container (column 5, lines 15-35). It would have been obvious to one of ordinary skill in the art to place the device wherever the user wanted on the shipping container, including being placed in the way of the locking bars so that the device would have to be removed in order to open the container and in so doing, provide added security for the container.

Regarding claim 10, the claimed tracking unit being attached to at least one locking bar by a special fastener that can not be released without using a special tool is met by the transceiver unit being attached using the mounting flanges (column 5, lines 15-35). The unit can be mounted using any kind of special attachment tool the user desires.

Regarding claim 11, the claimed antenna in the tracking unit is located in the vertical position in relation to the surface of the earth in order to better transmit and receive communications would have been a design choice by the user. Through routine experimentation the user would have found the most desirable position to mount the antenna in order to enable better communication with the satellites.

Regarding claim 12, the claim is interpreted and rejected as claim 1 stated above.

Regarding claim 15, the claim is interpreted and rejected as claim 4 stated above.

Regarding claim 16, the claim is interpreted and rejected as claim 5 stated above.

Regarding claim 17, the claim is interpreted and rejected as claim 6 stated above.

Regarding claim 19, the claim is interpreted and rejected as claim 11 stated above.

Regarding claim 20, the claimed cushioning material that is placed between the back of the tracking unit and a door of the shipping container would have been obvious in view of a gasket in order to protect the paint of the shipping container to which the device is attached.

Regarding claim 21, The claimed antenna that is capable of communication with both a GPS satellite and a two-way satellite is met by the transceiver unit communicating with a two-way communications satellite and global positioning satellites (column 8, lines 30-54);

The claimed processing device is met by the microprocessor (column 6, lines 16-30);

The claimed GPS receiver for receiving signals from the GPS satellite is met by the transceiver unit communicating with the global positioning units and therefore it would be obvious that the unit has a GPS receiver for receiving the GPS signals (column 8, lines 30-54);

The claimed transmitter for transmitting information to the central server via the two-way satellite is met by the transceiver communicating with the communication satellites and therefore it would be obvious that the unit has a transmitter for enabling the communication (column 8, lines 30-54);

The claimed housing is met by the transceiver unit as shown in figures 2A, 2B and 2C;

The claimed means for attaching and detaching the tracking unit to the shipping container is met by the mounting flanges for attaching the device (column 5, lines 15-35);

It would have been obvious to one of ordinary skill in the art to include a modem within the device to provide a backup communication medium in case the two-way satellite communication link was down.

The claimed means for attaching said tracking unit to the locking bars so that the locking bars can not be unlocked without first detaching the tracking unit is met by the transceiver unit can be attached a fixed position on the shipping container (column 5, lines 15-35). It would have been obvious to one of ordinary skill in the art to place the

Art Unit: 2632

device wherever the user wanted on the shipping container, including being placed in the way of the locking bars so that the device would have to be removed in order to open the container and in so doing, provide added security for the container.

Regarding claim 24, the claimed tracking unit further including a battery that powers those components which need to be on to receive messages from the central server via the two-way satellite and to power a clock and to turn other electrical components on that are powered by another source of power and a fuel cell that powers all components not powered by the battery is met by the transceiver unit being hard-wired for power and having a battery backup that powers the components when the hard-wired power is not active (column 6, lines 58-61). It would have been obvious to use any kind of power source for the hard-wired power source including a fuel cell.

Regarding claim 29, the claim is interpreted and rejected as claim 1 stated above.

Regarding claim 31, the claimed tracking unit having means to shut down part of the electronic components and waking them up upon the occurrence of certain events or a command received from the central server would have been obvious to one of ordinary skill in the art because it is well known in the art of communication systems to employ sleep-modes in order to conserve power.

Regarding claim 33, the claim is interpreted and rejected as claim 20 stated above.

4. Claims 2, 3, 13, 14, 23 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson in view of Layson Jr. et al. (Layson; US Patent 5,959,533).

Regarding claim 2, Robinson discloses all of the claimed limitations except for the claimed tracking unit having detecting means for detecting when it has been detached from a shipping container and communicating that information via the two-way satellite to the central server. Layson discloses *Tamper Detection For Body Worn Transmitter* that teaches including tamper/removal detection means within a tracking unit in order for remotely alerting a user that the tracking unit has been detached (abstract). Adding means to detect tampering/removal of the transceiver unit with remote reporting of the tampering/removal would increase the security of the device by alerting the user to the tampering/removal so that they can take appropriate action. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Robinson according to the teachings of Layson to include detecting means for tampering/removal with remote reporting of the event.

Regarding claims 3, 13, 14, 23 and 30, the claims are interpreted and rejected as claim 2 stated above.

5. Claims 7, 18, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson in view of Janky et al. (Janky; US Patent 5,751,245).

Regarding claim 7, Robinson discloses all of the claimed limitations except for the claimed tracking unit having a memory capable of receiving and storing geo-fencing information on the specified route to its destination and the processing device is programmed to determine if the tracking unit is outside of the geo-fence and to communicate that information to the central server via the two-way satellite. Janky discloses *Vehicle Route And Schedule Exception Reporting System* that teaches a route exception reporting system that reports to a central monitoring center when a vehicle that is being tracked deviates from a predetermined path that is stored in the memory of the unit on the vehicle (abstract). Adding the functionality of Janky to Robinson would give the user even more abilities regarding the safety and security of the container by being alerted when the vehicle deviates from a particular planned course and taking appropriate action. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Robinson according to the teachings of Janky to include a memory that stores a planned route and reporting any deviations from that route to the central server.

Regarding claim 18, the claim is interpreted and rejected as claim 7 stated above.

Regarding claim 25, Robinson discloses the following claimed limitations:

The claimed associating the shipping container with the portable tracking unit attached to the container in the central server would have been obvious because the device is being used to track the container and would therefore have to know which container was being tracked by which unit (column 8, lines 30-54);

The claimed tracking unit periodically determining its location via GPS satellites and transmitting that information to the central server via the satellite is met by the transceiver unit tracking the container (column 8, lines 30-54).

However, Robinson does not specifically disclose the claimed tracking unit determining whether certain events have occurred or not on one of the shipping container and the portable detachable tracking unit or both, the tracking unit transmitting that information to the central server via the satellite; determining whether the tracking unit is on course to its destination based upon this transmitted information according to a predetermined route or not and generating a message concerning whether the tracking unit is on course or not and whether the certain event has occurred or not. Janky teaches a route exception reporting system that reports to a central monitoring center when a vehicle that is being tracked deviates from a predetermined path that is stored in the memory of the unit on the vehicle (abstract). Adding the functionality of Janky to Robinson would give the user even more abilities regarding the safety and security of the container by being alerted when the vehicle deviates from a particular planned course and taking appropriate action. Therefore it would have been obvious to

Art Unit: 2632

one of ordinary skill in the art at the time of the invention to modify the device disclosed by Robinson according to the teachings of Janky to include a memory that stores a planned route and reporting any deviations from that route to the central server.

Regarding claim 26, the claim is interpreted and rejected as claim 25 stated above.

6. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson in view of Baker (US Patent 6,339,397).

Regarding claim 22, The claimed antenna that is capable of communication with both a GPS satellite and a two-way satellite is met by the transceiver unit communicating with a two-way communications satellite and global positioning satellites (column 8, lines 30-54);

The claimed processing device is met by the microprocessor (column 6, lines 16-30);

The claimed GPS receiver for receiving signals from the GPS satellite is met by the transceiver unit communicating with the global positioning units and therefore it would be obvious that the unit has a GPS receiver for receiving the GPS signals (column 8, lines 30-54);

The claimed transmitter for transmitting information to the central server via the two-way satellite is met by the transceiver communicating with the communication

satellites and therefore it would be obvious that the unit has a transmitter for enabling the communication (column 8, lines 30-54);

It would have been obvious to one of ordinary skill in the art to include a modem within the device to provide a backup communication medium in case the two-way satellite communication link was down.

However, Robinson does not specifically disclose the claimed means for determining when a door of the shipping container is open and means for communicating that information via the two-way satellite to the central server. Baker discloses *Portable Self-Contained Tracking Unit And GPS Tracking System* that teaches a tracking unit with detecting means for detecting when the door of the container has been opened and reporting that condition to a central monitoring center (column 5, lines 46-50). Adding a detection means to Robinson to alert the user when the door has opened would increase the security providing abilities of the device by always alerting the user to when the door was opened. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Robinson according to the teachings of Baker to include means for detecting when the door of the shipping container has been opened.

7. Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson in view of Janky and further in view of Layson.

Regarding claim 27, Robinson discloses all of the claimed limitations except for the claimed certain event being that the tracking unit being detached from the shipping container. Layson teaches including tamper/removal detection means within a tracking unit in order for remotely alerting a user that the tracking unit has been detached (abstract). Adding means to detect tampering/removal of the transceiver unit with remote reporting of the tampering/removal would increase the security of the device by alerting the user to the tampering/removal so that they can take appropriate action. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Robinson according to the teachings of Layson to include detecting means for tampering/removal with remote reporting of the event.

Regarding claim 28, the claim is interpreted and rejected as claim 27 stated above.

8. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson in view of Lemelson et al. (Lemelson; US Patent 5,731,785).

Regarding claim 32, Robinson discloses all of the claimed limitations except for the claimed tracking unit having means to connect to a nearby computer with access to the tracking unit being programmed to only grant access pursuant to a secret code, said tracking unit being capable of being programmed by the nearby computer to carry out

Art Unit: 2632

certain functions and to transmit certain information. Lemelson discloses *System And Method For Locating Objects Including An Inhibiting Feature* that teaches a control center that can program a tracking unit (column 3, lines 56-62). Adding means to allow remote programming of the transceiver unit would give the user much more functionality by allowing the user to program the device to operate in a specific manner that is defined by the user. It is well known to use secret codes when dealing with computer systems, especially when programming remote devices. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Robinson according to the teachings of Lemelson to include means to allow remote connection and programming of the tracking unit.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Keillor et al. *Asset Monitoring System And Associated Method*, US Patent 5,917,433;

Miyoshi, *Satellite Capturing/Tracking Method And Apparatus Capable Of Reducing Workloads Of Earth Station*, US Patent 6,061,019;

Auerbach et al. *Smart Container Monitoring System*, US Patent 6,753,775.

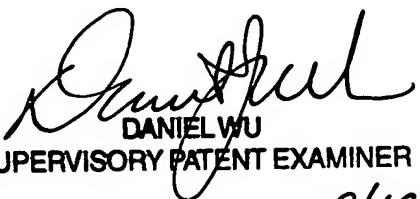
Art Unit: 2632

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis R. Hunnings whose telephone number is (571) 272-3118. The examiner can normally be reached on 8:00 am - 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TRH


DANIEL WU
SUPERVISORY PATENT EXAMINER
9/19/05